

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

1. (previously presented) A method for manufacturing a medical device, comprising the steps of:

providing a core member having a proximal region and a distal region;

disposing a polymer jacket over the distal region of the core member, the jacket having a substantially smooth outer surface;

winding a coil over the polymer jacket, wherein the coil is wound under tension; and

heating the jacket so that the coil tension is relieved and the outer surface of the jacket wicks between adjacent windings of the coil, providing an outer surface of the jacket relative to the coil in the final medical device that has desirable flexibility characteristics.

2. (original) The method of claim 1, wherein the polymer jacket includes a thermoplastic material and wherein the step of disposing the polymer jacket over the distal region of the core member includes disposing a thermoplastic polymer jacket over the distal region of the core member.

3. (previously presented) A method for manufacturing a medical device, comprising the steps of:

providing a core member having a proximal region and a distal region;

disposing a polymer jacket over the distal region of the core member, the jacket having a substantially smooth outer surface;

winding a coil over the polymer jacket, wherein the coil is wound under tension;

heating the jacket so that the coil tension is relieved and the outer surface of the jacket wicks between adjacent windings of the coil, providing an outer surface of the jacket relative to the coil in the final medical device that has desirable flexibility characteristics; and

wherein the coil includes a fluorocarbon material and wherein the step of winding a coil over the polymer jacket includes winding a coil that includes a fluorocarbon material over the polymer jacket.

4. (previously presented) A method for manufacturing a medical device, comprising the steps of:

providing a core member having a proximal region and a distal region;

disposing a polymer jacket over the distal region of the core member, the jacket having a substantially smooth outer surface;

winding a coil over the polymer jacket, wherein the coil is wound under tension;

heating the jacket so that the coil tension is relieved and the outer surface of the jacket wicks between adjacent windings of the coil, providing an outer surface of the jacket relative to the coil in the final medical device that has desirable flexibility characteristics; and

wherein the coil include an outer coating and wherein the step of winding a coil over the polymer jacket includes winding a coil that includes an outer coating over the polymer jacket.

5. (original) The method of claim 4, wherein the outer coating includes a fluorocarbon material.

6. (original) The method of claim 1, wherein the step of heating the jacket so that the coil tension is relieved and the outer surface of the jacket wicks between adjacent windings of the coil includes embedding the coil within the jacket.

7. (previously presented) A method for manufacturing a guidewire, comprising the steps of:

providing a core member having a proximal region and a distal region;

disposing a jacket over the distal region;

disposing a coil over the jacket; and

embedding the coil within the jacket so that the outer surface of the jacket wicks between adjacent windings of the coil, providing an outer surface of the jacket relative to the coil in the final guidewire that has desirable flexibility characteristics.

8. (previously presented) A method for manufacturing a guidewire, comprising the steps of:

providing a core member having a proximal region and a distal region;

disposing a jacket over the distal region;

disposing a coil over the jacket;

embedding the coil within the jacket so that the outer surface of the jacket wicks between adjacent windings of the coil, providing an outer surface of the jacket relative to the coil in the final guidewire that has desirable flexibility characteristics; and

wherein the step of disposing a coil over the jacket includes winding a coil under tension about the jacket.

9. (previously presented) A method for manufacturing a guidewire, comprising the steps of:

providing a core member having a proximal region and a distal region;

disposing a jacket over the distal region;

disposing a coil over the jacket;

embedding the coil within the jacket so that the outer surface of the jacket wicks between adjacent windings of the coil, providing an outer surface of the jacket relative to the coil in the final guidewire that has desirable flexibility characteristics;

wherein the step of disposing a coil over the jacket includes winding a coil under tension about the jacket; and

wherein the step of embedding the coil within the jacket includes relieving the tension within the coil.

10. (original) The method of claim 7, wherein the step of disposing a coil over the jacket includes disposing the coil over a proximal section of the jacket.

11. (original) The method of claim 10, further comprising the step of disposing a covering over a distal section of the jacket.

12. (original) The method of claim 7, further comprising the step of disposing a covering over the coil.

13. (withdrawn) A medical device, comprising:  
an elongate core member having a proximal region and a distal region;  
a polymer jacket disposed over the distal region of the core member;  
a coil disposed over the polymer jacket, the coil including an inner surface having a contour; and  
wherein the coil is embedded within the polymer jacket and wherein the polymer jacket follows at least a portion of the contour of the inner surface of the coil.

14. (withdrawn) The device of claim 13, wherein the distal region of the core member includes one or more tapered regions.

15. (withdrawn) The device of claim 13, wherein the jacket includes a thermoplastic material.

16. (withdrawn) The device of claim 13, wherein the coil includes a fluorocarbon.

17. (withdrawn) The device of claim 13, wherein the coil includes an outer coating that surrounds the coil.

18. (withdrawn) The device of claim 17, wherein the outer coating includes a fluorocarbon.

19. (withdrawn) The device of claim 13, wherein the jacket includes a proximal section and a distal section and wherein the coil is disposed over the proximal section.

20. (withdrawn) The device of claim 19, further comprising a coating disposed over the distal section of the jacket.

21. (original) A method for manufacturing a guidewire, comprising the steps of:  
providing a core member having a proximal region and a distal region;  
disposing a thermoplastic jacket over the distal region;  
disposing a coil under tension about the jacket, the coil including a fluorocarbon material;  
and

heating the thermoplastic jacket so that tension of coil is relieved and the coil embeds within the jacket.

22. (original) A method for manufacturing a guidewire, comprising the steps of:  
providing a core member having a proximal region and a distal region;  
disposing a thermoplastic jacket over the distal region, the jacket having a proximal section and a distal section;  
disposing a coil under tension about the proximal section of the jacket, the coil including a fluorocarbon material;  
heating the thermoplastic jacket so that tension of coil is relieved and the coil embeds within the jacket; and  
disposing a coating over the distal section of the jacket.

23. (withdrawn) A guidewire, comprising:  
a core member having a proximal region and a distal region;  
a thermoplastic jacket disposed over the distal region;  
a coil embedded within the jacket, the coil including a fluorocarbon material; and  
wherein the jacket wicks between individual windings of the coil.